

Application No. 09/706,370

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In the claims:

Please amend the claims as indicated below:

1. (previously presented) A method for managing financial transactions implemented using a computer-based data processing system, comprising:

performing an authentication process using the computer-based data processing system for a predicted transaction by a particular account holder, the predicted transaction having a predicted transaction amount and a predicted transaction time, the authentication process producing a transaction signature for presentation upon execution of the predicted transaction;

performing an authorization process using the computer-based data processing system for a particular transaction having actual transaction amount and an actual transaction time upon presentation of the transaction signature, including verifying using the computer-based data processing system that the presented transaction signature matches the transaction signature for the predicted transaction, the actual transaction amount matches the predicted transaction amount and the actual transaction time matches the predicted transaction time; and

performing an accounting process using the computer-based data processing system for the particular transaction as a result of a successful authorization process, including reconciling the predicted transaction amount and the actual transaction amount for the particular account holder.

2. (original) The method of claim 1, including:

storing the predicted transaction amount and the transaction signature for a predicted transaction in a database.

3. (original) The method of claim 2, including storing a predicted transaction time in the database.

4. (original) The method of claim 1, including setting up a time out interval between the authentication process and the authorization process.

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5. (previously presented) The method of claim 1, wherein the computer-based data processing system includes a financial transaction server, and the authentication process includes:

establishing a communication session between the particular account holder and the financial transaction server;

at the server, accepting an account number and an identification number for the particular account holder;

at the server, accepting the predicted transaction amount;

at the server, producing the transaction signature and sending the transaction signature to the particular account holder; and

entering identifying information for the predicted transaction in a memory at the server.

6. (original) The method of claim 5, wherein the authentication process includes prompting the particular account holder to supply a combination of digits from a personal identification code, wherein the combination does not include all of the personal identification code.

7. (previously presented) The method of claim 1, wherein the computer-based data processing system includes a financial transaction server, and the authorization process includes:

establishing a communication session between a party to the particular transaction and the financial transaction server;

at the server, accepting the presented transaction signature and the actual transaction amount;

at the server, comparing a time of the particular transaction with the predicted time, and comparing the presented transaction signature and actual transaction amount with the predicted transaction amount associated with the transaction signature for the predicted transaction; and

at the server, sending an authorization message to the party.

8. (original) The method of claim 7, including accepting identification of the party at the server.

9. (original) The method of claim 7, wherein the authorization process operates without identification of the particular account holder to the party.

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10. (original) The method of claim 7, wherein the authorization process operates with identification of the particular account holder to the party.

11. (previously presented) The method of claim 1, wherein the computer-based data processing system includes a financial transaction server, and the authentication process includes routines:

- establishing a communication session between the particular account holder and the financial transaction server;

- accepting an account number as input;

- prompting the particular account holder to supply a static identification number and a dynamically identified combination of digits from a personal identification code, wherein the combination does not include all of the personal identification code;

- accepting the predicted transaction amount as input;

- producing the transaction signature and sending the transaction signature to the particular account holder; and

- entering identifying information for the predicted transaction in a memory.

12. (previously presented) A method for managing financial transactions implemented using a computer-based data processing system, comprising:

- executing an authentication process using the computer-based data processing system over communication media for a predicted transaction by a particular account holder, including receiving a predicted transaction amount at an authentication time, the authentication process producing a transaction signature for presentation upon execution of the predicted transaction, communicating the transaction signature to the particular account holder, and storing the transaction signature and parameters associated with the predicted transaction;

- executing an authorization process using the computer-based data processing system over communication media for a particular transaction having actual transaction amount and an actual transaction time, including receiving the transaction signature over communication media from a party to the particular transaction at an authorization time, verifying that the received transaction signature matches the transaction signature stored for the predicted transaction, the actual transaction amount matches the predicted transaction amount and the authorization time meets a time criterion; and

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executing an accounting process using the computer-based data processing system for the particular transaction as a result of a successful authorization process, including reconciling the predicted transaction amount and the actual transaction amount for the particular account holder.

13. (original) The method of claim 12, including:

storing the transaction signature and the parameters associated with the predicted transaction in a database.

14. (original) The method of claim 13, including storing a parameter indicating acceptable transaction times in the database.

15. (original) The method of claim 12, including setting up a time out interval between the authentication time and the authorization time.

16. (previously presented) The method of claim 12, wherein the computer-based data processing system includes a financial transaction server, and the authentication process includes:

establishing a private communication session between the particular account holder and the financial transaction server;

at the server, accepting an account number and an identification number for the particular account holder;

at the server, accepting the predicted transaction amount;

at the server, producing the transaction signature and sending the transaction signature to the particular account holder; and

entering identifying information for the predicted transaction in a memory at the server.

17. (original) The method of claim 16, wherein the authentication process includes prompting the particular account holder to supply a combination of digits from a personal identification code, wherein the combination does not include all of the personal identification code.

18. (previously presented) The method of claim 12, wherein the computer-based data processing system includes a financial transaction server, and the authentication process includes:

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establishing a private communication session between the particular account holder and a the financial transaction server;

at the server, accepting the presented transaction signature and the actual transaction amount;

at the server, determining whether the authorization time falls within an acceptable time window, and comparing the presented transaction signature and actual transaction amount with the predicted transaction amount associated with the transaction signature for the predicted transaction; and

at the server, sending an authorization message to the party.

19. (original) The method of claim 18, including accepting identification of the party at the server.

20. (original) The method of claim 18, wherein the authorization process operates without identification of the particular account holder to the party.

21. (original) The method of claim 18, wherein the authorization process operates with identification of the particular account holder to the party.

22. (previously presented) The method of claim 12, wherein the computer-based data processing system includes a financial transaction server, and the authentication process includes:

establishing a communication session between the particular account holder and the financial transaction server;

accepting an account number as input;

prompting the particular account holder to supply a static identification number and a dynamically identified combination of digits from a personal identification code, wherein the combination does not include all of the personal identification code;

accepting the predicted transaction amount as input;

producing the transaction signature and sending the transaction signature to the particular account holder; and

entering identifying information for the predicted transaction in a memory.

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23. (previously presented) A financial transaction server, comprising:

a communication interface;

a computer-based data processing system coupled to the communication interface, the computer-based data processing system including resources for managing financial transactions, including

an authentication process communicating over the communication interface for authenticating predicted transaction by a particular account holder, including routines which handle receiving a predicted transaction amount at an authentication time, producing a transaction signature for presentation upon execution of the predicted transaction, communicating the transaction signature to the particular account holder, and storing the transaction signature and parameters associated with the predicted transaction;

an authorization process communicating over the communication interface for authorizing a particular transaction having actual transaction amount and an actual transaction time, including routines for handling receiving the transaction signature over the communication interface from a party to the particular transaction at an authorization time, verifying that the received transaction signature matches the transaction signature stored for the predicted transaction, that the actual transaction amount matches the predicted transaction amount and that the authorization time meets a time criterion; and

an accounting process executed for the particular transaction as a result of a successful authorization process, including routines reconciling the predicted transaction amount and the actual transaction amount for the particular account holder.

24. (original) The financial transaction server of claim 23, wherein the computer-based data processing system includes a local or remote database storing the transaction signature and the parameters associated with the predicted transaction.

25. (original) The financial transaction server of claim 24, including a parameter indicating acceptable transaction times stored in the database.

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26. (original) The financial transaction server of claim 23, wherein the computer-based data processing system includes a routine setting up a time out interval between the authentication time and the authorization time.

27. (original) The financial transaction server of claim 23, wherein the authentication process includes routines:

- establishing a private communication session between the particular account holder and a financial transaction server;

- accepting an account number and an identification number for the particular account holder;

- accepting the predicted transaction amount;

- producing the transaction signature and sending the transaction signature to the particular account holder; and

- entering identifying information for the predicted transaction in a memory.

28. (original) The financial transaction server of claim 27, wherein the authentication process includes a routine prompting the particular account holder to supply a combination of digits from a personal identification code, wherein the combination does not include all of the personal identification code.

29. (original) The financial transaction server of claim 23, wherein the authorization process includes routines:

- establishing a private communication session between a party to the particular transaction and a financial transaction server;

- accepting the presented transaction signature and the actual transaction amount;

- determining whether the authorization time falls within an acceptable time window, and comparing the presented transaction signature and actual transaction amount with the predicted transaction amount associated with the transaction signature for the predicted transaction; and

- sending an authorization message to the party.

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30. (original) The financial transaction server of claim 29, wherein the authorization process includes a routine accepting identification of the party at the server.

31. (original) The financial transaction server of claim 29, wherein the authorization process operates without identification of the particular account holder to the party.

32. (original) The financial transaction server of claim 29, wherein the authorization process operates with identification of the particular account holder to the party.

33. (original) The financial transaction server of claim 23, wherein the authentication process includes routines:

- establishing a communication session between the particular account holder and a financial transaction server;
- accepting an account number as input;
- prompting the particular account holder to supply a static identification number and a dynamically identified combination of digits from a personal identification code, wherein the combination does not include all of the personal identification code;
- accepting the predicted transaction amount as input;
- producing the transaction signature and sending the transaction signature to the particular account holder; and
- entering identifying information for the predicted transaction in a memory.

34. (previously presented) A article of manufacture, comprising:

- a machine readable storage medium;
- a computer program stored on said machine readable medium with resources for managing financial transactions, including
 - an authentication process communicating over the communication interface for authenticating a predicted transaction by a particular account holder, including routines which handle receiving a predicted transaction amount at an authentication time, producing a transaction signature for presentation upon execution of the predicted transaction,

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communicating the transaction signature to the particular account holder, and storing the transaction signature and parameters associated with the predicted transaction;

an authorization process communicating over the communication interface for authorizing a particular transaction having actual transaction amount and an actual transaction time, including routines for handling receiving the transaction signature over the communication interface from a party to the particular transaction at an authorization time, verifying that the received transaction signature matches the transaction signature stored for the predicted transaction, that the actual transaction amount matches the predicted transaction amount and that the authorization time meets a time criterion; and

an accounting process executed for the particular transaction as a result of a successful authorization process, including routines reconciling the predicted transaction amount and the actual transaction amount for the particular account holder.

35. (original) The article of claim 34, wherein the resources include a routine for storing the transaction signature and the parameters associated with the predicted transaction in a local or remote database.

36. (currently amended) The article of claim 35, including wherein the parameters associated with the predicted transaction include a included parameter indicating acceptable transaction times stored in the database.

37. (original) The article of claim 34, wherein the resources include a routine setting up a time out interval between the authentication time and the authorization time.

38. (original) The article of claim 34, wherein the authentication process includes routines:
establishing a communication session between the particular account holder and a financial transaction server;

accepting an account number and an identification number for the particular account holder;

accepting the predicted transaction amount;

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producing the transaction signature and sending the transaction signature to the particular account holder; and

entering identifying information for the predicted transaction in a memory.

39. (original) The article of claim 38, wherein the authentication process includes a routine prompting the particular account holder to supply a combination of digits from a personal identification code, wherein the combination does not include all of the personal identification code.

40. (original) The article of claim 34, wherein the authorization process includes routines:
establishing a private communication session between a party to the particular transaction and a financial transaction server;

accepting the presented transaction signature and the actual transaction amount;

determining whether the authorization time falls within an acceptable time window, and comparing the presented transaction signature and actual transaction amount with the predicted transaction amount associated with the transaction signature for the predicted transaction; and sending an authorization message to the party.

41. (original) The article of claim 40, wherein the authorization process includes a routine accepting identification of the party at the server.

42. (original) The article of claim 40, wherein the authorization process operates without identification of the particular account holder to the party.

43. (original) The article of claim 40, wherein the authorization process operates with identification of the particular account holder to the party.

44. (original) The article of claim 34, wherein the authentication process includes routines:
establishing a communication session between the particular account holder and a financial transaction server;
accepting an account number;

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prompting the particular account holder to supply a static identification number and a dynamically identified combination of digits from a personal identification code, wherein the combination does not include all of the personal identification code;

accepting the predicted transaction amount;

producing the transaction signature and sending the transaction signature to the particular account holder; and

entering identifying information for the predicted transaction in a memory.

45. (previously presented) A method for automated authentication, authorization and accounting for financial transactions implemented using a computer-based data processing system, comprising:

establishing an authentication record using the computer-based data processing system for a predicted transaction by a particular account holder, the predicted transaction having a predicted transaction amount and a transaction time parameter, and an authenticated transaction signature for presentation upon execution of the predicted transaction;

establishing an authorization record using the computer-based data processing system for a particular transaction indicating an actual transaction amount, an actual transaction time and a presented transaction signature;

matching the authorization record with the authentication record using the computer-based data processing system to determine whether the presented transaction signature matches the authenticated transaction signature for the predicted transaction, the actual transaction amount matches the predicted transaction amount and the actual transaction time matches the transaction time parameter; and

reconciling the predicted transaction amount and the actual transaction amount using the computer-based data processing system for the particular account holder.

46. (original) The method of claim 45, including:

storing the authentication record in a database including a plurality of authentication records for other predicted transactions.

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47. (original) The method of claim 45, wherein the time parameter comprises a time value indicated when the authorization record was created.

48. (original) The method of claim 45, wherein said matching includes determining whether the actual transaction time falls within a time interval indicated by the transaction time parameter.

49. (previously presented) The method of claim 45, wherein the computer-based data processing system includes a financial transaction server, and establishing an authentication record includes:
establishing a communication session between the particular account holder and the financial transaction server;

at the server, accepting an account number and an identification number for the particular account holder;

at the server, accepting the predicted transaction amount;

at the server, producing the transaction signature.

50. (original) The method of claim 49, including prompting the particular account holder to supply a combination of digits from a personal identification code, wherein the combination does not include all of the personal identification code.

51. (previously presented) The method of claim 45, wherein the computer-based data processing system includes a financial transaction server, and establishing an authorization record includes:
establishing a communication session between a party to the particular transaction and a the financial transaction server;

at the server, accepting the presented transaction signature and the actual transaction amount.

52. (original) The method of claim 51, including accepting identification of the party at the server.

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53. (original) The method of claim 52, including maintaining a list of authorized parties, and wherein said matching includes determining whether the identification of the party indicates a party in the list of authorized parties.

54. (original) The method of claim 51, wherein said establishing an authorization record does not require identification of the particular account holder.

55. (previously presented) The method of claim 45, wherein the computer-based data processing system includes a financial transaction server, and establishing an authentication record includes:

- establishing a communication session between the particular account holder and the financial transaction server;

- accepting an account number;

- prompting the particular account holder to supply a static identification number and a dynamically identified combination of digits from a personal identification code, wherein the combination does not include all of the personal identification code;

- accepting the predicted transaction amount;

- producing the transaction signature and sending the transaction signature to the particular account holder.

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